

## A new species of *Etisus* (Crustacea, Brachyura, Xanthidae) from New Caledonia

by Paul F. CLARK & Bella S. GALIL

**Abstract.** — A new species of *Etisus* H. Milne Edwards, 1834 is described from the New Caledonia lagoon. It is fully illustrated and compared with its closest congeners *E. anaglyptus* H. Milne Edwards, 1834 and *E. rhynchophorus* (A. Milne Edwards, 1873).

**Keywords.** — Crustacea, Brachyura, Xanthidae, *Etisus*, new species, New Caledonia.

### Une nouvelle espèce d'*Etisus* (Crustacea, Brachyura, Xanthidae) de Nouvelle-Calédonie

**Résumé.** — Une espèce nouvelle d'*Etisus* H. Milne Edwards, 1834 est décrite du lagon de Nouvelle-Calédonie. Elle est abondamment illustrée et comparée avec les espèces du genre dont elle est la plus proche, *E. anaglyptus* H. Milne Edwards, 1834 et *E. rhynchophorus* (A. Milne Edwards, 1873).

**Mots-clés.** — Crustacea, Brachyura, Xanthidae, *Etisus*, espèce nouvelle, Nouvelle-Calédonie.

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### INTRODUCTION

The Institut français de recherche scientifique pour le développement en coopération (ORSTOM) has undertaken surveys of the lagoon surrounding New Caledonia (RICHER DE FORGES, 1991). Amongst these collections was a new species of *Etisus*, the third new species in this genus to be recorded from the island. CROSNIER (1987a, b) previously described *E. laboutei* Crosnier, 1987 and *E. bargibanti* Crosnier, 1987. These three species along with *E. molokaiensis* (RATHBUN, 1906) [as, *Leptodius molokaiensis*, see RATHBUN, 1906: 847, Pl. 9, Fig. 9] all appear to be restricted to the Pacific Ocean. The remaining species of this genus (see SERÈNE, 1984: 218) are either distributed throughout the Indo-Pacific or restricted to the Indian Ocean.

**ABBREVIATIONS USED.** — Muséum national d'Histoire naturelle, Paris = MNHN; The Natural History Museum, London = NHM; The National Museum of Natural History, Smithsonian Institution, Washington D.C. = USNM; coll. = collected by; juv. = juvenile; Stn = Station. Measurements refer to width of carapace.

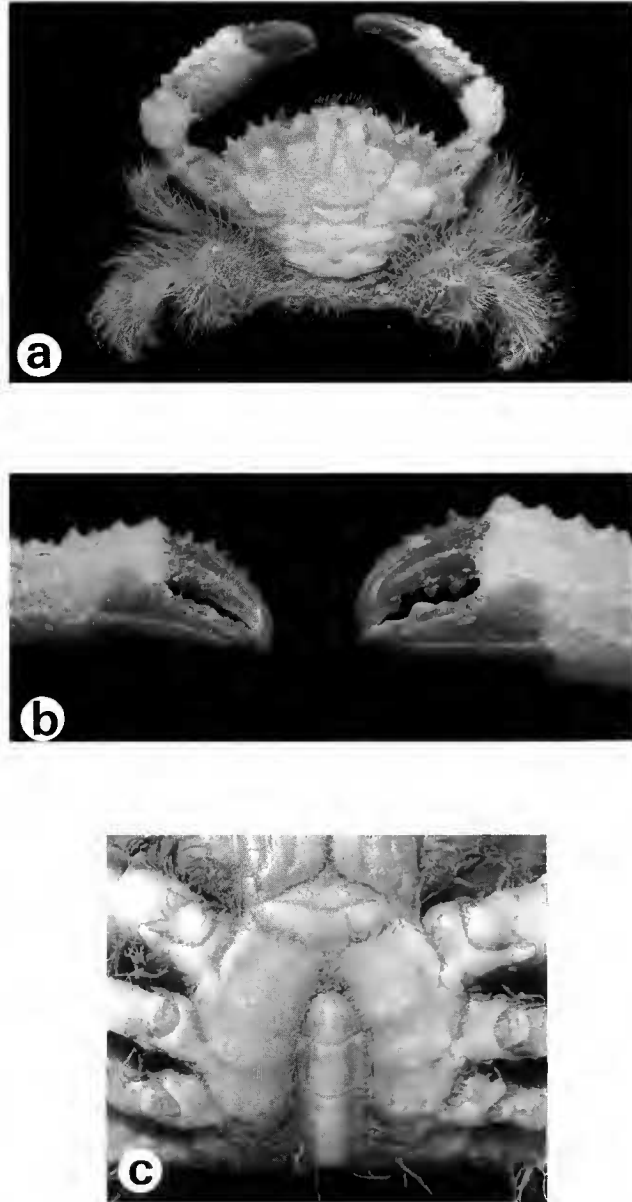


FIG. 1. — *Etisus villosus* sp. n., paratype, NHM 1994.3990: a, dorsal view; b, external surface of cheliped; c, ventral view.  
*Etisus villosus* sp. nov., paratype, NHM 1994.3990: a, animal entier, vue dorsale; b, face externe du chélicèpe; c, animal entier, vue ventrale.

DESCRIPTION

*Etisus villosus* sp. n.

(Figs 1-3)

MATERIAL EXAMINED. — New Caledonia, Lagoon East; coll. RICHER DE FORGES, ORSTOM- Stn 625, 21°59'2S, 166°53'6E, 34-40 m, 6 Aug. 1986, 1 ♂ 24 mm, holotype, MNHN MP B.24861- 1 ♂ 12 mm, paratype, MNHN MP B.24862- Stn 627, 21°58'9S, 166°50'7E, 45-47 m, 6 Aug. 1986, 2 ♀ 22 mm, 10 mm, paratypes, MNHN MP B.24863- Stn 650, 21°49'3S, 166°37'7E, 50 m, 7 Aug. 1986, 1 ♂ 23.5 mm, 2 juv., paratype, NHM 1994.3990-3992- Stn 659, 21°45'3S, 166°33'4E, 46-48 m, 8 Aug. 1986, 1 ♂ 18 mm, 1 ♀ 21 mm, paratypes, MNHN MP B.24864- Stn 663, 21°42'2S, 166°30'5E, 38-40 m, 8 Aug. 1986, 1 ♂ 24 mm, 1 ♀ 21 mm, paratypes, USNM 266806.

New Caledonia, canal Woodin, 37 m, coll. ORSTOM, 1 ♀ 15 mm, paratype, MNHN MP B.24864.

ETYMOLOGY. — From the Latin, *villus*, hairy, for the heavily setose pereopods.

TYPE LOCALITY. — New Caledonia, known only from the type locality.

DESCRIPTION OF HOLOTYPE MALE

Carapace depressed, transversely oval, 1.5 × wide as long, regions well defined, granulose. 2M partly divided longitudinally. 2L, 4L, 5L fused. Front slightly projecting, one third carapace

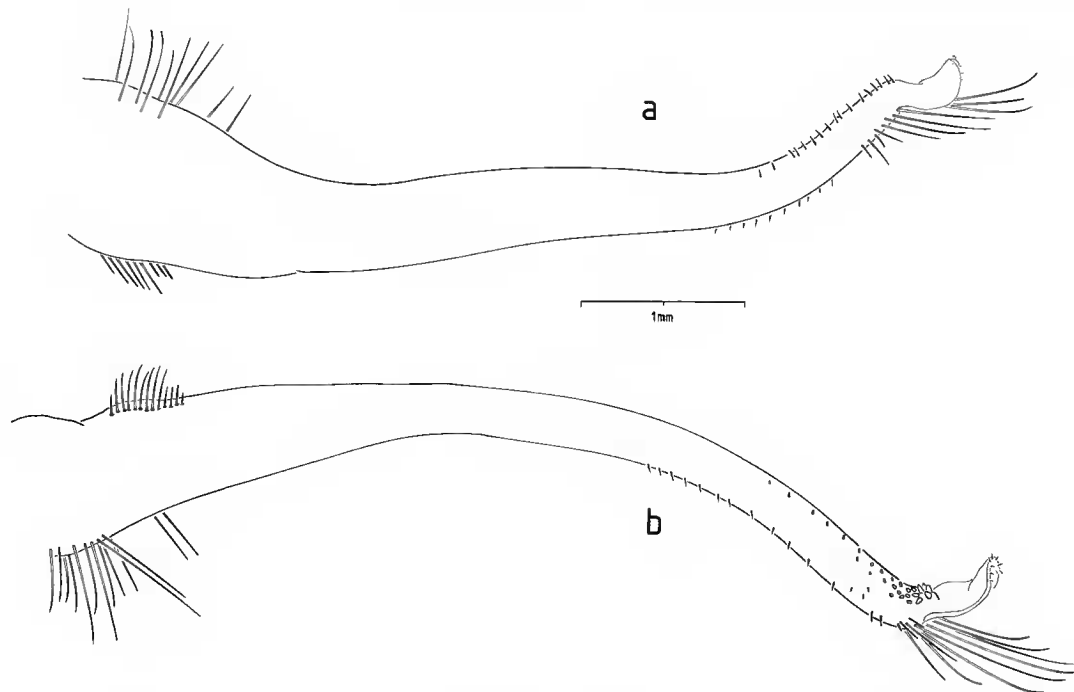


FIG. 2. — *Etisus villosus* sp. n., holotype, MP B.24861, whole left pleopod: a, dorsal view; b, ventral view.  
*Etisus villosus* sp. nov., holotype, MP B.24861, premier pléopode gauche : a, vue dorsale ; b, vue ventrale.

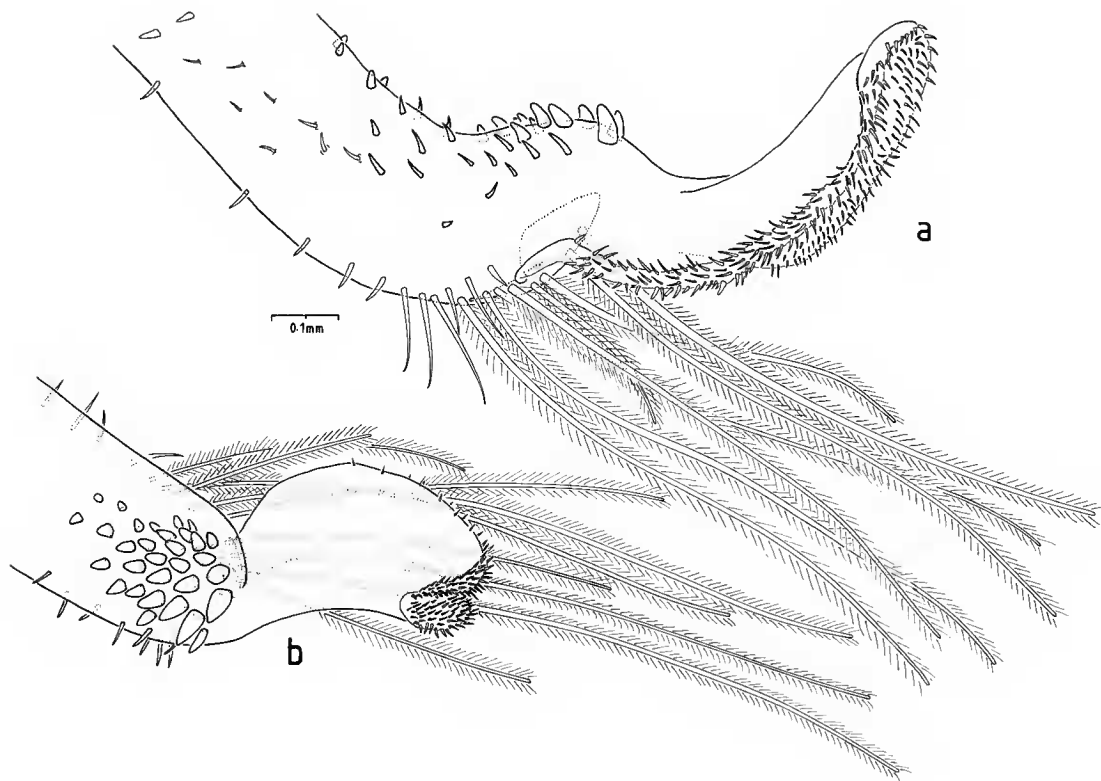


FIG. 3. — *Etisus villosus* sp. n., holotype, MP B.24861, tip of left pleopod: a, dorsal view; b, ventral view.

*Etisus villosus* sp. nov., holotype, MP B.24861, partie distale du premier pléopode gauche : a, vue dorsale ; b, vue ventrale.

width. Front divided into two wide submedian lobes separated by rounded sinus from acuminate supra-orbital angles. Margin of submedian lobes crescentric, tuberculate, setose. Exorbital angle dentate, acuminate. Anterolateral margins quadridentate, teeth multispinose, apically granulate, upcurved. Posterolateral margins convergent. Posterior margin costate, beaded. Basal antennal segment extends into orbital hiatus, excluding short, slender antennal flagellum from orbit. Anterior margin of buccal cavity covered by third maxillipeds. Exopod of third maxilliped, slightly shorter than endopod, columnar, distally notched, bearing triangular tooth distally on inner margin; lateral margins of ischium nearly parallel, internal margin prominently dentate, setose; inner distal angle of merus excavate; carpus setose distally, dactylus with terminal setal tuft.

Chelipeds unequal, massive. External surface of cheliped carpus with granular nubs, internal angle with two spines, distal spine longer. External surface of chela coarsely granulate, upper margin carinate, bearing two rows of conical, granulate tubercles, lower margin smooth. Finger dark coloured, colouration extending to palm, tips spoon-shaped.

Pereiopods densely set with plumose setae. Superior margin of pereiopodal meri spinulate. Dactylus tip cornute.

Male with five abdominal segments, segments 3-5 fused. First male pleopod elongate, sinuous, tapering; field of minute cornute denticles subdistally on lateral surface, long feathered setae on medial surface. Tip strongly recurved, its margins armed with minute spinules.

#### REMARKS

*Etisus villosus* sp. n. resembles both *E. anaglyptus* H. Milne Edwards, 1834 and *E. rhynchophorus* (A. Milne Edwards, 1873) in the general form of carapace, and in possessing heavily setosed pereopods. *E. villosus* is readily distinguished from the former by its granulose carapace, wide frontal submedian lobes, spinulate anterolateral teeth and from the latter species by possessing bispinose cheliped carpus and acute exorbital angle. The first male pleopods of these three species differ markedly: *E. anaglyptus* has a tapering tip with short setae subdistally (SERÈNE, 1984: 220, Fig. 137); *E. rhynchophorus* has a slightly recurved tip with short setae subdistally (TAKEDA & MIYAKE, 1968: 207, Fig. 3d, e); *E. villosus* sp. n. has a tip conspicuously recurved, densely spinose, with long feathered setae subdistally. *E. anaglyptus* is reported from the Red Sea and Madagascar to Japan and Australia while *E. rhynchophorus* has only been reported from Japan.

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